EMJ MS
EUROPEAN MULTIDISCIPLINARY JOURNAL OF MODERN SCIENCE
https://emjms.academicjournal.io/index.php/ Volume:6

Issues of Development of Innovative Technologies in the Banking Sector

Khodjimamedov Akmal Ashurovich
Independent researcher at the Samarkand Institute of Economics and Service

Annotation: The article discusses innovative technologies of the digital economy in the banking system of Uzbekistan, blockchain technologies and their features, efficiency and shortcomings, as well as the prospects for the use of financial technologies in the banking system.

Key Words: digital economy, banking system, blockchain technologies, remote banking services, fintech, financial technologies.

Today, in the context of globalization and scientific and technological progress, the leading countries of the world are focusing on the introduction of digital technologies in the economy, as well as their wide and effective use.

Ensuring the competitiveness and efficiency of the development of the economy of Uzbekistan through the introduction of digital economy technologies is one of the strategic priorities.

President Shavkat Mirziyoyev declared 2020 the Year of Science, Education and the Development of the Digital Economy. As a result, the State Program "Year of Science, Education and Development of the Digital Economy" was adopted, part of which includes 15 sections and 96 points on the priorities of economic development.

The state program pays special attention to the modernization of banks, the provision of Internet banking services, including:

- widespread use of digital technologies in the banking system, limiting the human factor;
- full implementation of the information system "credit history";
- The National Bank for Foreign Economic Affairs was tasked with creating a database of business projects to create a "project factory".

With the development of information technologies in the world, the term "digital economy" appeared, which was first used by Canadian scientist Don Tapscott in 1995 in his book "Electronic Digital Society: Advantages and Disadvantages of the Network Age". According to him, the main factor in the digital transformation of the activities of market participants is the development of digital culture.

The term "digital economy" was introduced in 1995 by Nicholas Negroponte, an American computer scientist at the University of Massachusetts, in a lecture to his colleagues on the superiority of the economy based on modern information and communication technologies over the old economy.

The digital economy is an economic Internet activity, as well as forms, methods, means and communication environment for its implementation.

In our opinion, the use of digital economy technologies in the banking system is a system of economic, social and cultural communication with customers using digital technologies, such as online services, distance learning, electronic payments, online sales of goods and services.

When we talk about the digital economy, we do not need to understand only Blockchain technology and its use in international financial markets or cryptocurrencies. Of course, Blockchain technology, cryptocurrencies are also part of the digital economy. However, the digital economy refers to an economy in which digital communications are carried out using IT.

Blockchain technology can be understood as an open journal that records repeating facts across multiple computers connected to the same network. Such a log can be viewed by anyone, but since it uses cryptographic algorithms to exchange data within the network, the data of the sender and recipient is well protected. In a blockchain network, information is a “public domain” that is created and stored by all network participants. Data previously entered into this network will not be changed or deleted.

Today, the country is studying the possibility of using blockchain technology as an experiment in money transfers, state cadastre and cartography, ticket transactions and other areas.

The advantages of using blockchain technology in the system of our national economy are as follows:

- data integrity. In blockchain technology, all data is stored on several computers at the same time, which ensures maximum data security.
- relatively cheap and easy-to-use blockchain technologies;
- exemption from excessive fees. These technologies work according to a simple “state-citizen” formula and allow you to limit additional commissions as much as possible.
- emergency transfer rates. The blockchain works 24 hours a day and ensures that transfers reach their destination in seconds.
- transparency. Information about the history of transfers will be available to all users, and the user will be able to access the data through a registered account.

Despite the conveniences listed above, blockchain technologies are not without certain drawbacks. In particular, the main problem of blockchain technology is the mass adoption of the technology.

In this case, for the blockchain to work, it is necessary to abandon the existing system and start over. But if this process is carried out in combination with digitization, then it is relatively invisible.

Electronic data measurement may also arise later as a specific problem. If we look at this in the field of banking services, it is clear that the volume of payments of all customers, electronic accounts, transfers made by them will expand over the years and then amount to hundreds of GB. A constant increase in this size can cause problems with electronic data storage.

For many users, blockchain technology is another aspect that doesn't like being completely at odds with privacy laws. This feature of blockchain technology may be useful in elections and referendums, in business and other similar areas, but it is likely that the banking system will be unacceptable to users. Blockchain provides a mathematical guarantee of complete transparency and accuracy of calculations without the involvement of any third party or

intermediary. therefore, the use of blockchain technology should be considered as a natural process arising from modern requirements.

A number of measures are being taken in Uzbekistan to improve the quality and scope of services provided to customers as part of the sustainable development of the banking and financial system, and to improve the culture of customer service by banks.

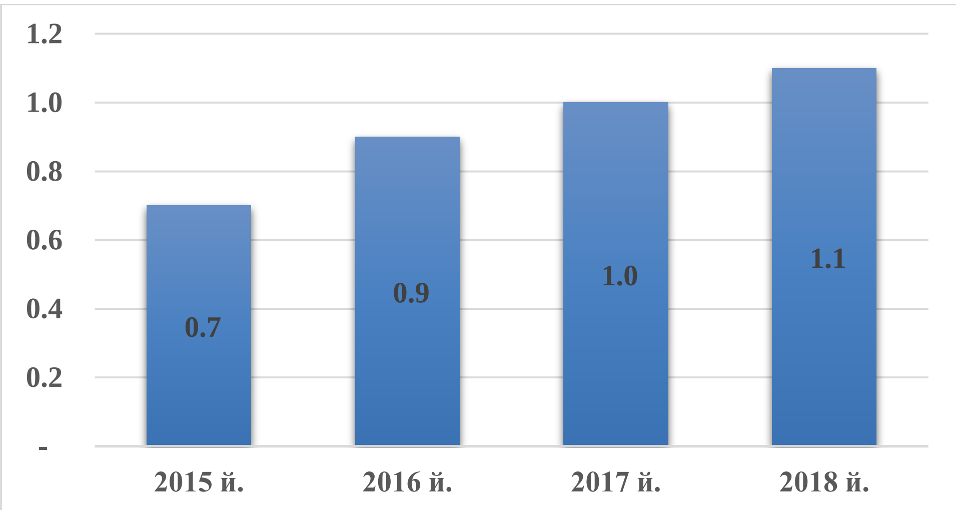
Also, for the first time, the concept of digital banking was introduced into the banking legislation of the Republic of Uzbekistan. "Digital banking is a bank or its subsidiary that provides remote banking services using innovative banking technologies (without providing cash services). Remote provision of banking services by digital banks is carried out in accordance with the internal documents of the bank, taking into account the requirements of the law.

The following mobile applications, implemented by commercial banks of Uzbekistan together with software developers, allow customers to carry out banking operations in real time:

- money transfer operations from card to card (P2P);
- make taxes, budgets, utility bills and many other payments;
- blocking (unblocking) of a bank card at the request of the client;
- microloans and repayment of loans for individuals;
- registration of online deposits, remote opening of deposit and loan (credit) accounts (for clients who have opened bank accounts in the prescribed manner);
- making payments from an international bank card account;
- monitoring and online conversion services;
- obtaining information about the location of the banking infrastructure (branches, exchange offices, ATMs and kiosks);
- services for crediting funds received through the international money transfer system to a bank account (deposit) or bank card at the request of the client.

1-drawing.

The total number of users of remote bank account management in the Republic of Uzbekistan. (as of 07/01/2019).



The total number of clients using remote bank accounts as of July 1, 2019 amounted to 9,783,063, of which legal entities and individual entrepreneurs - 546,520, individuals - 9,236,543 (Figure 1).

As of July 1, 2018 (compared to 6,687,547), the total number of users of remote bank account management increased by 146.3%, respectively, the number of legal entities and individual entrepreneurs (compared to 304,055) increased by 179.7% and the number of individuals (compared to 6,383,492) was 144.7%.

At the same time, about 94% of users of remote bank accounts were individuals. In general, the development of innovative technologies of the digital economy in the banking system:

- introduction of online banking to the population with the development of information technology and communications;
- saving time and money when introducing digital banking financial services through mobile and online platforms, ensuring the security of personal data, increasing the speed and quality of service;
- increases the possibility of developing electronic payment systems that receive interest or commission from the seller (borrower) of goods using the payment system platform.

References:

1. Указ Президента Республики Узбекистан, от 02.03.2020 г. № УП-5953 «О Государственной программе по реализации стратегии действий по пяти приоритетным направлениям развития Республики Узбекистан в 2017 — 2021 годах в «Год развития науки, просвещения и цифровой экономики»». https://lex.uz/.
2. Tapskott Don. Электронно-цифровое общество: Плюсы и минусы эпохи интеллекта. – Киев: ITN Press, 1999.
3. Кунгуров Д. Россиян ждет цифровая экономика. Высокие технологии способны реанимировать слабую экономику [Электронный ресурс]. https://utro.ru/ articles/2016/12/04/1307336.shtml.
4. *Н.Х. Жумаев.* Finance.uz/index.php/uz/fuz-menu-biznes-uz/6699-ra-amli-i tisodijotni-rivozhlantirishmamlakatga-nima-beradi
5. *Yulia Rieth.* Преимущества и недостатки технологии блокчейн. – magazine.decenter.org, 18.01.2019. https://magazine.decenter.org/ru/1-blokchein-i-kriptovalyuty/2-preimushestva-i-nedostatki-tekhnologiiblokchein
6. *Stolterman, Erik; Croon Fors, Anna* (2004). «Information Technology and the Good Life». Information systems research: relevant theory and informed practice. p. 689. ISBN 1-4020-8094-8.
7. https://cbu.uz/oz/press_center/reviews/75510/